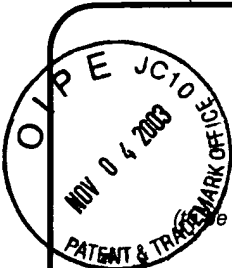
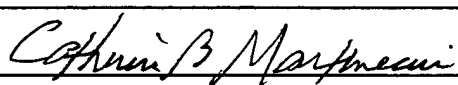



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

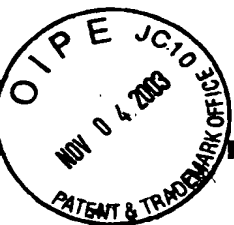
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|  TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/616,873 | |
| | Filing Date | 07/10/2003 | |
| | First Named Inventor | Xunming Deng | |
| | Group Art Unit | 2812 | |
| | Examiner Name | Conf. No. 1562 | |
| Total Number of Pages in This Submission | 9 | Attorney Docket Number | 03108/PHYS00303 |

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Reply | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | return postcard |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application | Remarks | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | Catherine B. Martineau Emch, Schaffer, Schaub & Porcello |
| Signature |  |
| Date | 31 October 2003 |

| CERTIFICATE OF MAILING | | | |
|---|---|------|----------|
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 10/31/03 | | | |
| Typed or printed name | Sheryl A. O'Connor | | |
| Signature |  | Date | 10/31/03 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Practitioner's Document No. 03108/PHYS00303

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application

of _____

Inventor(s)

for _____

Title of invention

the specification of which is being transmitted herewith

OR

In re application of: Xunming Deng et al.

Application No.: 0 10/ 616,873 Group No.: 2812

Filed: July 10, 2003 Examiner:

For: NOVEL HOT-FILAMENT CHEMICAL Conf. No. 1562

VAPOR DEPOSITION CHAMBER AND

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Assistant Commissioner for Patents

Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory;
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

☒ deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

37 C.F.R. § 1.8(a)

☒ with sufficient postage as first class mail.

37 C.F.R. § 1.10*

☐ as "Express Mail Post Office to Addressee"

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☐ transmitted by facsimile to the Patent and Trademark Office.

Signature

Sheryl A. O'Connor

(type or print name of person certifying)

(Information Disclosure Statement [6-1]—page 1 of 8)

Date:

10/31/03

NOTE: "An information disclosure statement shall be considered by the Office if filed by the applicant within any one of the following time periods:

(1) Within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d);

(2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application;

(3) Before the mailing date of a first Office action on the merits; or

(4) Before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114."

37 C.F.R. § 1.97(b).

NOTE: "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) each inventor named in the application;

(2) each attorney or agent who prepares or prosecutes the application; and

(3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).

NOTE: The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13 -25 at 17.

WARNING: "No information disclosure statement may be filed in a provisional application." 37 C.F.R. § 1.51(d).

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections
and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☒ Identification of Prior Application in Which Listed Information Was Already Cited
and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
 - 7A. ☐ EPO Search Report
 - 7B. ☐ English Language Version of EPO Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☐ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

(complete the following, if appropriate)

Sections _____, respectively, have been continued on ADDED PAGE(S).

NOTE: "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

(Information Disclosure Statement [6-1]—page 2 of 8)

Section 1. Preliminary statements

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

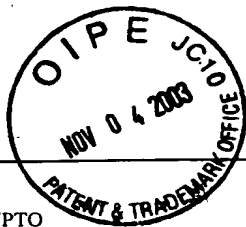


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|---|---|----|---|------------------------|---------------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 10/616,873 |
| | | | | Filing Date | July 10, 2003 |
| | | | | First Named Inventor | Xunming Deng |
| | | | | Group Art Unit | 2812;Conf. No. 1562 |
| | | | | Examiner Name | |
| Sheet | 1 | of | 2 | Attorney Docket Number | 03108/PHYS00303 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-------------|----------------------------|--------------------------------|--|---|
| Examiner Initials | Cite No. | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | NumberKind Code (if known) | | | |
| | | US- 5,082,359 | 01-1992 | Kirkpatrick | |
| | | US- 5,397,737 | 03-14-1995 | Mahan et al. | |
| | | US- 5,776,819 | 07-07-1998 | Mahan et al. | |
| | | US- 6,124,186 | 09-26-2000 | Molenbroek et al. | |
| | | US- 6,214,706 B1 | 04-10-2001 | Madan et al. | |
| | | US- 6,251,183 B1 | 06-26-2001 | Iwancizko et al. | |
| | | US- 6,427,622 | 08-2002 | Madan et al. | |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
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| Examiner Initials | Cite No. | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T |
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| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 10/616,873 |
| | | | | Filing Date | July 10, 2003 |
| | | | | First Named Inventor | Xunming Deng |
| | | | | Group Art Unit | 2812;Conf. No. 1562 |
| | | | | Examiner Name | |
| Sheet | 2 | of | 2 | Attorney Docket Number | 03108/PHYS00303 |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|----------------------|--------------------------|--|----------------|
| | | H. Povolny, S. Han, X.B., Xiang and X. Deng/Hot-Wire Deposition of c-Si and a-Si Using Different Gas Excitations By A Coiled Filament/Abstract submitted to 19 th International Conference Amorphous and Microcrystalline Semiconductors Science and Technology (ICAMS19) Acropolis Center, Nice, France, 27-31 August 2001 | |
| | | Xunming Deng/Construction of a novel hot-wire deposition system employing a coiled hot filament/Disclosed at "Amorphous Silicon Team Meeting" for NREL/DOE (Nat'l Renewable Energy Laboratory/Dept. of Energy) in August 2000. | |
| | | S. Yu, E. Gulari, and J. Kanicki/Center for Display Technology and Manufacturing, University of Michigan, Ann Arbor, Michigan 48109/Selective deposition of polycrystalline silicon thin films at low temperature by hot-wire chemical vapor deposition/May 1996. | |
| | | Mitsuru Ichikawa, Jun Takeshita, Akira Yamada and Makoto Konagai/Dept. of Electrical and Electronic Engineering, Tokyo, Japan/Jpn. J. Appl. Phys. Vol 38 (1999) pp. L24-L26, Part 2, No. 1A/B, 15 January 1999, ©1999 Publication Board, Japanese Journal of Applied Physics/January 1999. | |
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|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Section 4. Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted

NOTE: "A copy of any patent, publication, pending U.S. application or other information, as specified in paragraph (a) of this section, listed in an information disclosure statement is required to be provided, even if the patent, publication, pending U.S. application or other information was previously submitted to, or cited by, the Office in an earlier application, unless:

- (1) The earlier application is properly identified in the information disclosure statement and is relied on for an earlier effective filing date under 35 U.S.C. 120; and
- (2) The information disclosure statement submitted in the earlier application complies with paragraphs (a) through (c) of this section." 37 C.F.R. § 1.98(d).

WARNING: "This exception to the requirement for copies of information does not apply to information which was cited in an international application under the Patent Cooperation Treaty." Notice of April 20, 1992 (1138 O.G. 37-41, 38).

WARNING: "Information which is cited or submitted to the Office in the parent application of a file wrapper continuing application under 37 C.F.R. § 1.62 will be part of the file before the examiner and need not be resubmitted in the continuing application. Likewise, the examiner will consider information cited or submitted to the Office in a parent application when examining a continuing application and thus this information need not be resubmitted unless applicant desires the information to be printed on the patent." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

WARNING: While a copy of a non-English language item of information need not be submitted, if it was previously submitted to, or cited by, the Office in a prior application, provided it is properly identified in this statement and this application relies on that earlier filing date under 35 U.S.C. 120, nevertheless, the requirement in § 1.98(a)(3) for a concise explanation of non-English language information would not be satisfied by a statement that a reference was cited in the prosecution of a parent application. The concise explanation must explain the relevance, as presently understood by the person designated in § 1.56(c) most knowledgeable about the content of the information. Notice of January 9, 1992, 1135 O.G. 13-25, at 20.

This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application SN.: 0 10/205,481 , filed on 7/25/2002 (date).

(complete the following, if applicable)

☐ This application also relies, under 35 U.S.C. 120, on the earlier filing date of prior application SN.: 0 / , filed on _____ (date).

The following references were submitted to, and/or cited by, the Office in the prior application(s) and, therefore, are not required to be provided in this application:

All references listed in Section 2.

(Information Disclosure Statement — Section 4. Identification of Prior Application in Which Listed Information Was Already Submitted and for Which No Copies Are Submitted or Need Be Submitted
[6-1]—page 6 of 8)

Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. § 1.98(a)(2) requires that any information disclosure statement filed under § 1.97 shall include:
"A legible copy of:

- (i) Each U.S. patent application publication and U.S. and foreign patent;
- (ii) Each publication or that portion which caused it to be listed;
- (iii) For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion. . ."

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

(complete the following, if applicable)

☒ Exception(s) to above:

- ☒ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
- ☐ Cumulative patents or publications identified in Section 5.

(Information Disclosure Statement—Section 6. Copies of Listed Information Items Accompanying
This Statement [6-1]—page 7 of 8)

Section 10. Identification of Person(s) Making This Information Disclosure Statement

The person making this statement is

(check each applicable item)

- (a) ☐ the inventor(s) who signs below

SIGNATURE OF INVENTOR

(type name of inventor who is signing)

- (b) ☐ an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c))

SIGNATURE OF INVENTOR

(type name of inventor who is signing)

- (c) ☒ the practitioner who signs below on the basis of the information:

(check each applicable item)

- ☒ supplied by the inventor(s).
☒ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. § 1.56(c))
☒ in the practitioner's file.


SIGNATURE OF PRACTITIONER

Catherine B. Martineau
(type or print name of practitioner)

P.O. Box 916
P.O. Address

Toledo, Ohio 43697-0916

Reg. No.: 31,854

Tel. No.: (419) 243-1294

Customer No.: 20879

(Information Disclosure Statement—Section 10. Identification of Person(s) Making This Information Disclosure Statement [6-1]—page 8 of 8)